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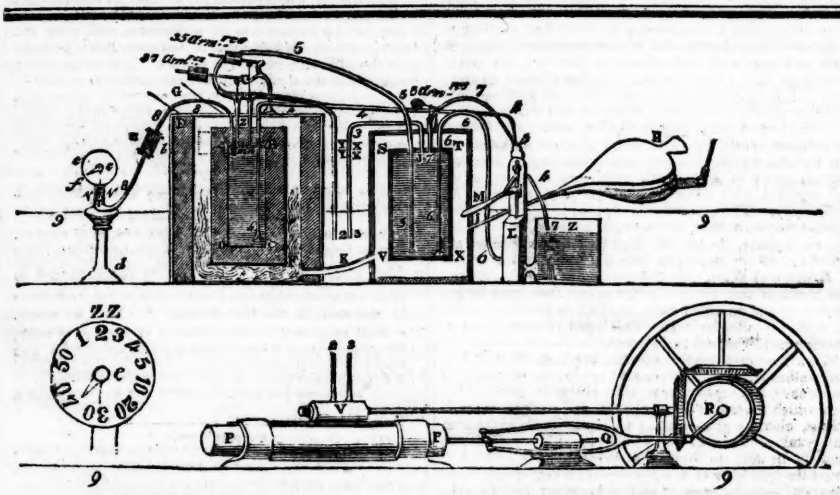

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MR. PERKINS'S NEW STEAM-ENGINE.

Whether this much-vaunted invention may or may not realize the expectations of its sanguine and ingenious projector, is a question upon which we are not about to offer any opinion of our own. It is the office of a caterer for the public to consult the taste of that public rather than his own judgment: but in this discharge of his duty, he may be permitted to offer an opinion.

It is the less necessary to speculate upon the merits of Mr. Perkins's new steam-engine, because its practical utility will soon be ascertained on that large scale which can alone demonstrate its powers. We confess that (aware as we are of the inventive talent of Mr. Perkins) we are slow to believe in the almost miraculous properties ascribed to his engine. We heartily wish that it may realize his most sanguine anticipations; because we should hail as benefactor of mankind any individual from whose ingenuity an immense saving of coals should accrue, or whose labours should materially improve our steam-navigation. We know there are persons who question the originality of Mr. Perkins's alleged discoveries; and amongst these is a correspondent in the last *Monthly Magazine*. On this subject, however, we shall observe, that whether the same ideas have or have not occurred to others, if Mr. Perkins brings the scheme to maturity, his merit will be rather enhanced than impaired by the failures of his predecessors. It was long since said that there is nothing new under the sun. All that genius can hope to accomplish, is to modify, compound, and form new arrangements; and he who does this the most skilfully is the cleverest fellow. We shall now proceed to the description of the machine in question, which we shall illustrate by an engraving we have prepared at a considerable expense. It is an exact fac-simile of that published in the *Edinburgh Philosophical Journal.—Edit. Kal.*

Description of Mr. Perkins's new Steam-engine, and of the application of his Invention to Engines of the Old Construction.

We have already communicated to our readers in the two last numbers of this journal, all the authentic information which we could obtain respecting Mr. Perkins's new steam-engine; and we have used the utmost diligence to obtain such farther information as may, in some measure, gratify that curiosity which these imperfect notices have excited. There never has been in our day an invention which has created such a sensation in the scientific and in the manufacturing world. The steam-engine of Mr. Watt had been so long considered as the greatest triumph of art and science, that it was deemed a sort of heresy to regard it as capable of improvement; and, notwithstanding all that has been done by Mr. Woolff, and other eminent engineers, the undoubted merit of their engines has scarcely yet been admitted by the public. Under such circumstances, Mr. Perkins's claims were likely to meet with various kinds of opposition. Instead of hailing it as an invention which was to do honour to the age in which we live, and to add a new and powerful arm to British industry, imperfect experiments and confined views were urged against the principle of its construction, the jealousies of rival traders were arrayed against it, imaginary apprehensions of danger were excited, and short-sighted politicians sounded the alarm, that such an invention would precipitate our country from its lofty pre-eminence among the manufacturing nations of the world.

Most of these grounds of opposition have been now removed by direct experiment. Mr. Perkins's engine is actually at work. Its operations have been witnessed and minutely examined by engineers and philosophers of all kinds; and the most unreasonable sceptics have been compelled to acknowledge the justness of its principles, as well as the energy of its operations. The active and inventive mind of Mr. Perkins, however, did not remain satisfied with this experiment. He has discovered a method, which we consider equal in value to his new engine, by which he can convey the benefit of his original principle to steam-engines of the old construction; and this has been recently succeeded, we are told, by a most extraordinary discovery, that the same heat may be made to perform its part more than once, in the active operations of the engine.

In order to convey to our readers some idea of these great inventions, we have obtained a drawing, made by M. Montgolfier, jun. which, though it does not respresent the actual machine, yet contains such a view of its parts as is necessary for understanding its principle.

The generator, which supplies the place of the boiler in ordinary steam-engines, is a cylinder ABCD, made of gun-metal, which is more tenacious, and less liable to oxidation, than any other. The metal is about three inches thick; and the vessel, containing eight gallons of water, is closed at both ends, with the exception of the five openings for tubes, shown in the figure. The generator is placed vertically in a cylindrical furnace EF, whose chimney is G, the heat being sustained by a pair of bellows H, wrought by the engine, and conveying its blast in the direction to IK to F. A heat of from 400° to 450° of Fahrenheit is thus applied to the generator, which is entirely filled with water. The valves in the tubes *m*, *n*, which are steel cylinders working in hollow steel-pipes, are loaded, the one with 37, and the other with 35 atmospheres; so that none of them can rise till the heat creates a force greater than the least of these weights.

Let us now suppose, that, by means of the compressing pump L, whose handle M is wrought by the engine, water is forced into the generator; this opens the valve above *n*, loaded with 35 atmospheres, and instantly a portion of the heated and compressed water *flashes* out in the form of steam of high elasticity, and of a temperature of 420°; and communicating by the steam-pipe 2, 2, 2, with the valve-box V, it enters the cylinder PP, lying horizontally, and gives motion to its piston PQ, which performs 200 strokes in a minute, and drives a crank R, which gives a rotatory motion to a fly-wheel, as seen in the figure.* When the eduction-valve is opened, the steam, after having produced its stroke, is carried by the eduction-pipe 3, 3, 3, into the condenser STXV, where it is condensed into water at a temperature of about 320°, and under a pressure of 5 atmospheres; from thence, by the pipe 6, 6, 6, it is drawn into the pump L, whence it is forced along the pipe 4, 4, 4, to the generator, thus performing a complete circuit.

The forcing-pump acts with a pressure exceeding 35 atmospheres; consequently, when the water received in it from the condenser is urged into the generator, it must expel a portion equal to itself in volume: this portion, as above described, flashes instantly into highly elastic steam. The forcing-pump, too, is so contrived as to act with a steady force, and, consequently, the expelled water must be driven from the generator in a steady current, and thus steam of a constant elasticity is supplied to produce the power.

* The parallel motion represented at PQ, is not the correct one used by Mr. Perkins. The piston-rod is connected by a flexible joint, with a sort of carriage with four wheels at each end, and working in a strong horizontal box of steel.

Some philosophers are of opinion, that the heat of the portion of water which escapes, is of itself sufficient to maintain the steam at that high degree of heat and elasticity with which it reaches the piston; and, consequently, that this engine is nothing more than a High Pressure Engine. Other persons, however, have supposed, and we confess we are among that number, that the portion of water which escapes, must necessarily carry off a quantity of heat from the adjoining stratum (the temperature of which *may* be thus reduced below the freezing point.)—But it is more likely, that, in virtue of some new law of the transmission of heat under the combined conditions of elevated temperature and high pressure, while the water, also, is forced to remain in contact with the red hot generator, the whole water in the boiler may be laid under requisition to furnish the discharged fluid with its necessary supply of caloric.

It is almost unnecessary to state, that the motion of the engine is produced by the difference in elasticity between the steam pressing on one side of the piston and that pressing on the other. In the first case, the steam recently produced, acts with a force, say of 500lb. on the square inch, while that on the weak side, or that communicating with the condenser, acts with only 70, the difference, or 430lb. being the true power gained.

When there is a surplus of water in the generator, occasioned either by working the forcing pump too violently, or by too vehement a heat, the water will escape by the tube *m* with a valve above, loaded with 37 atmospheres, and will pass by the pipe 5, 5, 5, into the condenser STXV.

In order to explain the ingenious manner in which the pipe 4, 4, 4 supplies the generator with water, we must observe that this pipe communicates with the pump L, which is wrought by the engine. This pump draws the water by the pipe 6, 6, 6, from the condenser STXV, and returns it by the pipe 4, 4, 4; that is to say, when the handle M is drawn up, the water rushes into the cylinder of the forcing pump, through a valve in the pipe 6, 6, 6, opening *into* that cylinder: This valve, of course, instantly closes when the downward stroke of the pump is made, and the water now escapes through a valve opening *outwards*, along 4, 4, 4; thus effectually cutting off all direct or uninterrupted communication between the generator and the condenser. In order to keep the water in the condenser at a pressure of five atmospheres, the blast of the bellows H goes round the condenser STXV; but, when it is not sufficient for this purpose, cold water is introduced from the reservoir Z, by means of the pipe 7, 7, 7, loaded with five atmospheres.

From the high elasticity of the steam employed in this engine, it has been supposed to be very liable to explosion. This, however, is a vulgar error. Since there is no reservoir of steam exposing a large surface to its expansive force, as in the common high pressure engines, the steam being generated only in sufficient quantity to produce each succeeding stroke of the piston, the ordinary source of danger is entirely removed. But, in order to take away all apprehensions on that subject, the induction pipe 2, 2, 2, in which the steam is actually generated, is made so strong as to sustain an internal force of *four thousand* pounds on the square inch, which is *eight* times more powerful than the actual pressure, viz. 500 pounds on the square inch, with which the engine works. This enormous superabundance of strength is still farther secured by means of the safety-pipe 8, 8, 8, provided with a thin copper "safety-bulb" *a b*, which is made so as to burst at a pressure of 1000 pounds on the square inch. In order to satisfy his friends on this very important point, Mr. Perkins has repeatedly urged the power of the steam to such a degree as to burst the copper bulb in their presence. This tube merely rends, or is torn asunder like a piece of paper, and occasions no injury either to the spectators, or to the apparatus; so that we have no hesitation in considering this engine, notwithstanding its tremendous energies, as much more safe in its operations than even the common low pressure engine.

The safety tube 8, 8, 8, communicates also with the indicator *c d*, having a dial-plate *c e*; and an index *e f*, which, by means of a suitable contrivance at *v*, *v*, indicates the pressure or number of atmospheres with which the engine is working.

The cylinder and piston PPQ, have been separated from the rest of the engine, for the sake of distinctness. Their proper position, however, will be understood by supposing the two lines 9, 9; 9 9 to coincide.

The engine which we have now described, is at present performing actual work in Mr. Perkin's manufactory. It is calculated as equal to a ten-horse power, through the cylinder is no more than 2 inches in diameter, and 18 inches long, with a stroke of only 12 inches. Although the space occupied by the engine is not greater than 6 feet by 8, yet Mr. Perkins considers that the apparatus (with the exception of the working cylinder, PP, and piston PQ) is perfectly sufficient for a thirty-horse engine. When the engine performs full work, it consumes only *two* bushels of coal in the day.

ON THE APPLICATION OF MR. PERKINS'S PRINCIPLE TO STEAM-ENGINES OF THE OLD CONSTRUCTION.

Great as the invention is which we have now described, yet we are disposed to think that the application of the principle to old steam-engines is not less important.* When we consider the enormous capital which is at present embodied in Great Britain in the substantial form of steam-engines, and the admirable elegance and skill with which these noble machines impel and regulate the vast population of wheels and pinions over which they reign, we feel as if some vast innovation were proposed upon our established usages, by the introduction of Mr. Perkins's engine. The very idea that these potentates of the mechanical world should be displaced from their thrones; that their strong holds should be dismantled; their palaces demolished, and their whole affairs placed under a more economical management, is somewhat startling to those who dread change, and admire institutions that both work and wear well. Mr. Perkins, however, has saved them from such a degradation. He has allowed them to retain all their honours and privileges, and proposes only to invigorate them with fresh influence and power.

In this new system, *the old engines, with their boilers, are retained unaltered.* The furnaces alone are removed. Mr. Perkins constructs a generator consisting of three horizontal tubes of gun-metal, connected together, filled and supplied with water from a forcing-pump, as in his own engine. This generator is exposed to heat in an analogous manner, so that, by means of a loaded valve, which opens and shuts, the red hot fluid may be constrained till forced out of the generator into the water in the boilers of Bolton and Watt. By this means, as much low pressure steam of four pounds on the square inch may be generated by *one* bushel of coals, as could be produced in the old engine by *nine* bushels. This most important result was obtained by actual experiment.

Since these great improvements have been effected, Mr. Perkins has made a discovery that seems, in its practical importance to surpass them all. He now entirely dispenses with the use of the condenser, and works the engine against the atmosphere alone; and by methods with which we are not acquainted, and which indeed it would not be prudent for him to disclose at present, he is enabled *to arrest the heat after it has performed its mechanical functions, and actually pump it back to the generator, to unite with a fresh portion of water, and renew its useful labours.* In an operation like this, a considerable portion of the heat must still be lost, but the wonder is that any should be saved; and we venture to say, that the most sanguine speculator on the omnipotence of the steam-engine never dared even to imagine the possibility of such an invention.

We are well aware, that, in announcing this discovery, we are exposing ourselves to the criticisms of those whose belief is naturally limited by their own experience; but it is satisfactory to know, that Captain Basil Hall (whose account of Mr. Perkins's discoveries and inventions, as delivered before the Royal Society of Edinburgh, gave such universal satisfaction) has been entrusted with Mr. Perkins's discovery, and that he speaks confidently of the soundness of its principles, as well as the practicability of its application.

We cannot quit this subject without congratulating the country on the brilliant prospects with which these inventions promise to invest all our national concerns. At any period of the history of British industry, they must have excited the highest expectations; but, originating as they have done, when our commerce, our manufactures, and our agriculture, the three stars of our national prosperity, have just passed the lowest point of their orbit, and quitted, we trust for long, the scene of their disturbing forces, we cannot but hail them with the liveliest enthusiasm, and regard them as contributing, to ensure the preeminence of our industry, to augment the wealth and resources of the nation, and, by giving employment to idle hands, and direction to idle minds, to secure the integrity and the permanence of our national institutions.*

* This invention appears to have been fully established by direct experiment, whereas the *new engine*, with all its great promise, is still only undergoing trial.

* It is due to the truth and candour of philosophical history, to mention, that Mr. Perkins is not our countryman; but the age of jealousy against America has happily gone past, and we hail, with sincere pleasure, any circumstance which contributes to the scientific renown of our great descendants, and companions in freedom and intelligence.

CHICKENS HATCHED BY STEAM.

A man of respectable appearance (who stated that he had travelled through various nations, for the express purpose of ascertaining the most effectual way of hatching eggs without the assistance of the bird) appeared before the Lord Mayor, a few days ago, for the purpose of making an affidavit of a discovery of an infallible mode of producing chickens from eggs, without waiting for the delays of nature! The chicken-hatcher said, his invention had excited the astonishment of several noblemen, gentlemen, and ladies, who were present while he was hatching; and that he could bring geese to perfection, as well as ducks and hens. He also stated that his *labour* in bringing the invention to maturity, had been very great. The chicken-hatcher then declared that he had constructed a machine for the eggs, and, by the judicious application of steam, contrived to fulfil the ends of nature, to the surprise of all who watched the progress of animation in the egg. When first he advanced in his labours with the engine, he was obliged to sit up 30 days and 30 nights, to turn the eggs, lest the birds should be deformed; but now he had brought the thing to such perfection, that he was not obliged to sit up one night for a brood of 1000 chickens, and they appeared in a more unexceptionable character than if brought up under the care of their mothers. The fowls which sprung out of the steam had the extraordinary faculty of laying at all seasons; whereas those to which nature was the handmaid were not at all to be prevailed upon, except at stated periods, to supply the delicacy.—The Lord Mayor then signed an affidavit stating the power of the invention, and the chicken-hatcher departed.—*London paper.*

Solomon said, long ago, that there was nothing new under the sun. The fact is, that the great discovery which the above-mentioned projector lays claim to, is of very remote date indeed. The only difference in the ancient and modern process is, that steam is now recommended to perform the office of the Egyptian ovens, in which chickens were produced in the distant ages of which we speak. We shall resume this subject more at large next week, when we shall show that artificial warmth, electricity, and a variety of applications of heat have been resorted to, in order to supersede the animal heat of the mother.—*Edit. Kal.*

MAGNETISM.

Royal Society, Edinburgh.—A paper was read on a subject of which the world is more ignorant than of any that has been submitted for many years to philosophic investigation—we mean on magnetism. Much has been discovered on this subject, but more remains behind; and we are much deceived if the paper we heard on Monday will not open a field for inquiry, almost new. The paper detailed a series of experiments with respect to the effect of heated antimony and the magnetic needle. A bar of antimony was procured, near each extremity of which was fixed a strip of copper; a needle was placed on the bar, which was then stationed so as to coincide with the magnetic pole. The south end of the antimony bar was then heated, and the magnetic needle was then found to deviate many degrees to the east. On heating the north end of the bar the needle deviated many degrees to the west. Other experiments were then tried, showing the effect on the needle produced by other metals unequally heated, in modes nearly similar to what we have stated. Zinc, silver, and copper, all affected the needle when thus treated. Copper and zinc were then united (in one experiment, by twisting them together at one end, in another coiling them round) and the united ends were placed in a vessel of water, the needle being fixed on one of the metals, out of the water. On adding sulphuric acid to the water a great deviation was observed in the needle: on adding nitric acid, a different and greater deviation was produced.

We abstain from mentioning the number of degrees of deviation, fearing that we may have unfortunately failed to remember them precisely; but these results confirm a theory which had long since occurred to us respecting the existence of a connection between light, heat electricity, and magnetism. The connection of light, and magnetism has been lately demonstrated by the communication of magnetic power to a bar of iron, through the medium of the violet shade separated from a ray of light by a prism, and the experiments we have just mentioned show an extraordinary connection between heat and electricity (or galvanism) and magnetism. It appears to us, that experiments on these four imponderable matters conducted on a large scale and with a view to discovery, might produce results of the utmost importance to mankind.—*Edinburgh Literary Gazette.*

The Bouquet.

"I have here only made a nosegay of culled flowers, and have brought nothing of my own but the thread that ties them."
MONTAIGNE.

REVIVIANA.

Under this head we purpose from time to time to revive works of merit, which are either extremely rare or entirely out of print; and we solicit assistance in this department, which may be rendered valuable and interesting. The little work with which we now commence our series abounds with wit, satire, and a deep insight of human nature. It consists of 78 chapters, comprehended in 276 pages; the whole of which it is our intention to introduce in our present volume, with the exception of certain passages, less allowable in our times than when the work was originally produced.—*Edit. Kal.*

MICRO-COSMOGRAPHIE; or, a Piece of the WORLD DISCOVERED; in ESSAYES, and CHARACTERS. By* DR. JNO. EARLE. *The Eighth Edition. London, Printed by R. D. for P. C. 1664.

1. A CHILD is a Man in a small Letter, yet the best Copy of *Adam* before he tasted of *Eve* or the Apple; and, he is happy, whose small practice in the world can onely write his Character. He is natures fresh picture newly drawn in Oyl, which time and much handling dims and defaces. His soul is yet a white paper unscribled with observations of the world, wherewith at length it becomes a blurr'd Note-book. He is purely happy, because he knows no evil, nor hath made means, by sin, to be acquainted with misery. He arrives not at the mischief of being wise, nor endures evils to come by foreseeing them. He kisses and loves all, and, when the smart of the rod is past, smiles on his bearer. Nature and his Parents alike dandle him, and tice him on, with a bait of Sugar, to a draught of Wormwood. He plays yet like a young Prentice the first day, and is not come to his task of melancholy. All the language he speaks yet is Tears, and they serve him well enough to expresse his necessity. His hardest labour is his tongue, as if he were loth to use so deceitful an Organ; and he is best company with it, when he can but prattle. We laugh at his foolish sports, but his game is our earnest: and his Drums, Rattles and Hobby-horses, but the Emblemes, and mockings of mens busi-nesse. His Father hath writ him as his own little story, wherein he reads those dayes of his life that he cannot remember; and sighes to see what innocence he hath outlived. The elder he grows, he is a staire lower from God; and like his first father, much worse in his Breeches. He is the Christians example, and the old mans relapse: The one imitates his purenesse, and the other falls into his simplicity. Could he put off his body with his little Coat, he had got eternity without a burthen, and exchang'd but one Heaven for another.

2. A YOUNG RAW PREACHER is a Bird not yet fledg'd, that hath hopt out of his nest to be cherping on a hedge, and will be straging abroad at what peril soever. His backwardnesse in the University hath set him thus forward; for had he not truanted there, he had not been hasty a Divine. His small standing and time hath made him a proficient only in boldnesse, out of which and his Table-book he is furnisht for a preacher. His collections of Study are the Notes of Sermons, which, taken up at Saint *Mary's* he utters in the Countrey. And if he write *Brachygraphy*, his stock is so much the better. His writing is more than his reading; for he reads only what he gets without book. Thus accomplisht he comes down to his friends, and his first salutation is Grace and Peace out of the Pulpit. His prayer is conceited, and no man remembers his Colledge more at large. The peace of his Sermon is a full careere, and he runs wildly over hill and dale, till the clock stop him. The labour of it is chiefly in his Lungs. And the onely thing he has made in it himself, is the Faces. He takes on against the Pope without mercy, and hath a jest still in Lavender for *Bellarmine*. Yet he preaches heresie if it com's in his way, though with a mind, I must needs say, very *Orthodoxe*. His Action is all Passion, and his speech interjections. He hath an excellent faculty in bemoaning the people, and spits with a very good grace. His stile is compounded of twenty severall mens, only his body imitates some extraordinary. He will not draw his handercher out of his place, nor blow his Nose without discretion. His commendation is, that he never looks upon Book, and indeed he was never used to it. He preaches but once a year, though twice a Sunday; for the stuffe is still the same, onely the dressing a little altered. He hath more tricks with a Sermon, then a Taylor with an old Cloak to turn it, and piece it, and at last quite disguise it with a new preface. If he have waded further in his profession, and would shew reading of his own, his Authors are Postills, and his School-divinity a Catechisme. His fashion, and demure habit gets him in with some Town precisian, and makes him a guest on Friday-nights. You shall know him by his narrow Velvet cape, and Serge facing, and his ruffe, next his hair, the shortest thing about him. The companion of his walk is some zealous Tradesman, whom he astonisheth with strange points, which they both understand alike. His friends and much painfulness may prefer him to thirty pounds a year, and this means to a Chamber-maid: with whom we leave him now in the bonds of Wedlock. Next Sunday you shall have him again.

(To be continued.)

Fine Arts.

INCE BLUNDELL.

TO THE EDITOR.

SIR,—It would be vain to attempt to find out the beauties of a small portion of the works of art, contained in the collection at Ince Blundell, in a single visit. I have had the good fortune to view that delightful place several times, and always with increased pleasure, having each visit discovered treasures which I had not previously thought of, and I am yet but partially acquainted with its rarities. To give a description adequate to the merits of the colection would, I am aware, be beyond the abilities of any person not residing on the spot, taking into consideration the extent and variety of the subjects; but if simply mentioning the principal statues, without much comment, be worthy your farther notice, I shall think my trouble well repaid.

I left off in my last with an account of one of the bas-reliefs, not having then any idea of a second communication. It will be necessary now to return to those works of greater consequence to the admirer of stulpture, the statues; many, in fact all, of which, are well worthy the strictest attention; particularly as from them may be formed an interesting series illustrating the progress of sculpture from the early Egyptians (with whom the art is said to have originated) to the most renowned period of Grecian excellence. The earliest statues in the collection appear to be the two Egyptian idols, carved in granite, in all the rude stiffness so remarkable in early productions of that country: they are supposed to represent male and female, with excessive rarity for their only merit. Another statue, for the name of which I am at a loss, is evidently the work of a Grecian artist, soon after the art had been communicated to the Greeks by the Egyptians. The figure partakes of the stiffness of the foregoing two, but with greater attention to the finish and expression of the anatomical parts, for which the Grecians are justly distinguished.

In the statue of the "Spes Etrusca," as it is called, we take a rapid stride towards the zenith of the art: yet here we are not entirely free from the trammels of Egyptian formality, though in the lightly-cast drapery of this figure we see evident signs of a struggle against former constraint. The artist has, no doubt, improved upon an Egyptian model.

That potent goddess of the Egyptians, Isis, from the simplicity in the style of sculpture, forms a part of the attractions of this collection. She bears the cistrum (an instrument of music used in rejoicing at the festivals of the overflowing of the Nile) in one hand, in the other she has a water vessel, perhaps emblematic of the same river.

If I were to trace through their various peculiarities the many statues which continue the chain of progress, from the crude Egyptian to the refined and more elaborately-finished Grecian works, I should become tedious; suffice it, therefore, to say, that, to the connoisseur, the connecting link is discernable without difficulty. I shall, therefore, pass on to those statues which are more particularly pleasing to the general observer.

A spirited statue of the Venus Victrix, so called from the small figure of Victory which she holds in one hand while with the other she supports a spear, is one of these. The graceful attitude of this statue and the excellence of the sculpture render it extremely interesting.—The Priestess of Bacchus, in the act of playing on the crotalos (a kind of cymbal which she has attached to her hands) might form a companion to the last in elegance and ease of appearance: it is deservedly ranked amongst the better productions in this collection.—The beauty and lightness in the drapery of the statue, called Julia Pia should not be passed over, as it bears evident signs of a masterly hand. I should rather be inclined to think this statue represented the celestial muse, Urania, from the globe and stylus which she bears, allusive to the care she extended over the heavenly bodies.

There is a degree of boldness of design and manly beauty in the striking figure of Esculapius.

The statues of Mercury and Apollo are numerous, and, in general, possess much of the beauty and elegance which were the characteristics of those deities. One of the latter, in particular, combines the gracefulness and commanding grandeur which ever mark the statues of this god. He is represented as extremely youthful, but with a dignified and contemplative expression of countenance, flowing hair, and beautifully-proportioned limbs.

There are several interesting infantine figures: the best of which are a "Virtumnus, an "Amorind," and a spirited little "jeune Mercure," remarkable for its characteristic, arch, and selfish expression.—I observed a pretty group of a boy and swan, and one of a young Bachante and goat, which cannot fail to attract universal observation. The subject is a boy in the act of tantalizing a goat: he holds a bunch of grapes in each hand, which the goat seems to await in anxious expectation. This group is justly celebrated for its beauty and simplicity: it is sculptured in all the playful elegance of Grecian taste; the fleshyness of the boy, the smiling expression of face, and the strict attention to nature, observable in every part, are acknowledged, and it is pronounced to be one of the finest specimens in the collection, although, perhaps, it does not rank in the same class of art as the satyr and hermaphrodite.

I have attempted to describe a few only of the numerous statues which the munificence of the father of the present proprietor has accumulated, which, with the head of the Indian Bacchus, and other considerable additions lately made, form a most extensive and valuable collection, and is a bright ornament to the county of Lancaster. Should what I have said be worthy your consideration, I may, at some future period, trouble you with a few remarks on the most admired bas-reliefs and sarcophagi—which last form a striking feature in this collection, as much for their firm state of preservation as for their great antiquity.—Yours, ZURRO.

June 27.

XUM

Poetry.

SONNET.

Farewell, thou sacred gift of her, *the one*
Whose form of symmetry had power to move
Me, till then, callous to the arts of love!
(Would that herself like thee were all mine own!)
When late the mutual farewell had pass'd
Between myself and Gertrude of the Lune—
(Oh though we cannot meet each other *soon*,
Heav'n grant that parting may not be the *last*!)
By duty called, I could not but comply,
Hurried along from her I loved so well;
On thee, her gift, how did my senses dwell,
In deep yet innocent idolatry!
Oh fare thee well!—though many miles shall sever
Gertrude from me, my heart is with her ever!

LEIGH WALDEGRAVE.

SONNET.

Perhaps 'twere better never to have known
That there *had been* primeval happiness,
Than thus to know, and mourn life's blessings flown,
Comparing Eden with this wilderness!
Time was, when man was blest with every bliss;
Grief was unknown, but *all* was peace and joy,
Unmix'd and boundless.—What a change is this!
Cares, pains, woes, sorrows, *all* that can annoy!
And these the sin——down, base engendering thought!
Life still is joy, earth still is paradise,
And angels move therein as in the skies!
Oh may I fill my duties as I ought,
And then, if thou, my lovely one! art mine;
To live is heaven, and I will not repine!

Liverpool. LEIGH WALDEGRAVE.

SONNET.

GRASMERE, WESTMORELAND,
July, 1822.

Oh God of nature!—from thine emerald throne,
Look down and view this paradise thou mad'st!
Ah! surely here grew that which thou forbad'st
Our first progenitors to feed upon;
This place was Eden!—No, the sacred page
Doth not reveal *where* Eden's glory dwelt:
'Tis gone, since first our sires God's anger felt:
And why inquire in this *most wretched* age?
Down, black, repining thought! curst discontent!
Thou bane of life, depart; I scorn thy sway!
Here could I dream life's hours, in joy, away,
If Gertrude kindness to my passion lent.
Ah! if she *knew* it, and *return'd* my love,
Each spot with her an Eden then would prove!

LEIGH WALDEGRAVE.

SONNET;

VIRTUOUS AND LAWLESS AMBITION.

They say there are *two* sisters of this name:
I bend at *virtuous* Ambition's shrine:
Oh, goddess! hear my prayer, adopt me thine,
And guide my footsteps to the path of fame.
But *thou*, delusive phantom! who hast led
Napoleon, weltering in earth's deluged gore,
Though gorged to fulness, panting still for more,
Like dropsy, thirstier, the more he fed,
Thee do I follow not;—by *thee* inspired
Was England's Richard made his brother's foe;
To *thee* and Cromwell, Charles's death we owe!
No!—by a nobler sense my bosom's fired;
Thou, *gentler* goddess! unto thee I turn;
Oh! let thy flame within me ever burn.

Liverpool. LEIGH WALDEGRAVE.

SONNET.

Lov'st thou the freshness of the flowery fields,
The wood's sweet gloom, the mountain's pathless height,
Whence, far expanding to the raptured sight,
Nature her lovely charms profusely yields;
O'er meadow, rock, and stream,—or wood that shields
Its flowers of perfumed breath, or beauty bright;
And ocean, struggling in its glorious might;
Or silent clouds, that summer's sunbeam gilds!
Oh! may this feeling ever cherished be,
Lady! throughout thy tranquil, charmed life;
For thou art sweetly kind, and meekly free:
While they who love not nature's smiles are rife
With artful wiles and deepest treachery,
With dark remorse, and agonizing strife.

Doncaster. C.

TO KEZIA.

Oft as thine eye shall fondly trace
Each simple wreath I twin'd for thee;
Whate'er the time, whate'er the place,
Oh! think of me.

When pleasure sparkles in thine eye,
And every scene is fair to see;
When swift the happy moments fly,
Oh! think of me.

Thy life, thy bliss, may Heaven defend;
But shouldst thou, by its stern decree,
E'er want a fond, a faithful friend,
Oh! think of me.

W. G.

TO THE EDITOR.

SIR,—A friend of mine, to whom I am much indebted for the assistance he has rendered me in gathering epitaphs, lent me last week an old volume of extracts. As I was taking a slight view of the contents, the following attracted my notice, and, if you deem it worthy of insertion, I shall be proud to see it in a corner of your valuable miscellany Should this be the case, you shall hear further in this department.—Yours, AUGUSTUS.

Leeds, June 27, 1823.

AGAINST LIFE—[FROM THE GREEK OF POSIDIPPUS.]

What tranquil road, unvex'd by strife,
Can mortals choose through human life?
Attend the courts, attend the bar,
There discord reigns, and endless jar;
At home the weary wretches find
Severe disquietude of mind;
To till the fields gives toil and pain,
Eternal terrors sweep the main;
If rich, we fear to loose our store,
Need and distress await the poor;
Sad cares the bands of hymen give,
Friendless, forlorn, th' unmarry'd live.
Are children born? we anxious groan;
Childless, our lack of heirs we moan;
Wild, giddy schemes our youth engage,
Weakness and wants depress old age.
Would fate then with my wish comply,
I'd never live, or quickly die.

FOR LIFE—[FROM THE GREEK OF METRODORUS.]

Mankind may rove, unvex'd by strife,
Through ev'ry road of human life;
Fair wisdom regulates the bar,
And peace concludes the wordy war;
At home, suspicious mortals find
Serene tranquillity of mind
All beauteous nature decks the plain,
And merchants plow for gold the main;
Respect arises from our store,
Security from being poor;
More joys the bands of Hymen give,
Th' unmarry'd with more freedom live;
If parents, our blest lot we own;
Childless, we have no cause to moan;
Firm vigour crowns our youthful stage,
And venerable hairs old age;
Since all is good then, who would cry,
"I'd never live, or quickly die?"

Chit Chat.

LORD BYRON AND THE AUTHOR OF WAVERLEY.

We extract the following sketch of the contrasted characters of the works of the Author of Waverley, and of Lord Byron, from Warner's Illustrations of the Novels, by the former, as deserving the attention of our readers:

"Our author's claims to mastership in his art, are not, however, founded exclusively on the excellences to which we have hitherto adverted: 'the great charm of his work (as it has been well observed) is derived from the kindness of heart, the capacity of generous emotions, and the lights of native taste which he ascribes so lavishly, and, at the same time, with such an air of truth and familiarity, even to the humblest of its favourites. There is no keen or cold-blooded satire—no bitterness of heart, or fierceness of resentment, in any part of his writings.' The eulogy is deserved to a great extent: for they are, with only one exception, the very transcripts of an amiable, kind, and benevolent mind; and display a curious and most striking contrast with the spirit and feeling, the colouring and character, of the equally extraordinary productions of his only British compeer in stretch of genius and power of thought. The world of the Author of 'Waverley,' with all its physical and moral imperfections, is, what it was originally pronounced to be, 'very good;' illuminated by many a gleam of sunshine to gladden the heart, and with many spots of green to delight the eye of man; while its inhabitant, though a weak, an erring, and a wayward being, has still his capacities of goodness and his redeeming virtues, the vestiges of that divine image in which he was at first created. The world of 'Childe Harold's' poet, on the contrary, is little better than the primæval chaos; wrapped in palpable darkness, and composed of jarring and repulsive principles, and the human heart is a mass of 'defecated evil,' swelling with the leaven of fierce passion, dissocial feeling, and malignant selfishness. The *moral effect* likely to be produced by these opposite characters of two of the most popular of our present writers is sufficiently obvious. While the latter is scattering around him the seeds of sullen discontent, with all that is good, and great, and fair, in the heavens above and on the earth beneath, and severing the knot which binds man to man, in confidence, affection, and esteem; the former (more worthily employed) is inspiring gratitude for the blessings and beauties by which our nature is surrounded, and cheerfulness in the perception and enjoyment of them; and riveting and polishing every link in the common chain of sympathy and benevolence."

WHALES.

[*From the Constitution or Cork Morning Post, of June 23.*]

We have been favoured with the following letters, describing a novel spectacle which was witnessed on Thursday last in the bay of Ring, between Youghal and Cable-island. The first from a gentleman who resides near the place, dated Thursday night, is as follows:

"On this day about the time of high water, a novel sight was witnessed here by the arrival in the Bay of a number of porpoises; they were seen first coming in regular order, and I am informed no regiment could keep a more exact line. On hearing the circumstance I went to the beach, and there saw seven or eight boats, with men, women and children, up to their necks in water endeavouring to drag to the shore those immense monsters of the deep.

"On their being seen coming into the bay, the fishermen used all expedition with their boats, and having got outside they drove them in on the long flat sand where all sizes, all ages, and all sexes proved their enemy. It is said not one of them escaped. No less than 42 have been taken and secured, the largest of which is over 20 feet long and as round as a good sized bullock, the blubber on the poll is over a foot in thickness, and they will yield an immensity of oil, if the poor people can procure casks to make the most of this GOD-SEND. I am informed that some of the fishermen jumped on their backs, and notwithstanding the tremendous splashing with their

talls, maintained their seats, and with hatchets continued to administer deep and deadly wounds, until the foe lay prostrate. The water was crimsoned as far as the eye could reach. I presume you will say the battle was little short of Waterloo—there some of the enemy escaped, but here none was permitted so to do."

The following is from a gentleman who went from Youghal as a spectator:—

"In the course of Thursday, 42 large animals, of the whale species, appeared between Youghal and Cable-Island, near Knockadoon, from whence the people manned their boats, and having driven them into shallow water and killed one, the entire were easily taken. Being gregarious, they closed round the dead one, attracted by its blood, and remained until finally despatched at leisure. I have just returned from the spot, where they are lying on the beach, some of them 30 feet in length, after being divested of their outside coat of thick fat, which the people are preparing to extract oil from."

A Novelty.—Ship-launching is familiar to most people living on the sea board, in all countries; but house-launching is a new discovery in the present age of invention. Yet the curious who will take the trouble, may be gratified by stepping into Maiden-lane, and they will there see a large three-story brick building, chimneys all standing, placed on ways, and already removed a considerable distance from its old foundation, without yet having sustained a crack or rent of any kind.—*American paper.*

The late Lord Salisbury made the following impromptu to a fly on a lady's lip:

"Oh happy, happy, happy fly!
If I were you, and you were I,
Then I should be the happy fly,
And you would be Lord Salisbury."

A thriving Trade.—A cabinet-maker, living in the county of Lancaster, not 100 miles from the populous village of Ashton-within-Mackerfield, was invited to the funeral of a relative who lately died in Cheshire. The cabinet-maker's wife said he could not possibly attend, for he was busy making a coffin; but desired the messenger to give their (i. e. her husband's and her own) respects to the relatives of the deceased, and to tell them they were doing very well, as they had always five or six coffins a week to make.

Extract from the *Leeds Mercury* of July 14, 1750:—"Advertisement. A landau and four horses will be at the sign of the Chequer, at the back of the shambles, in Leeds, on Thursday, the 19th instant, and take in passengers for London, Bristol, and Bath, which will be in London the 28th or 29th instant. By Thomas Hincheliffe." Instead of ten days, the same journey is now performed regularly by the Rockingham and the Union Coaches in 26 hours.

Longevity.—There is now living in Drosi, a little village of Calabria, a woman whose age is 125 years, who has, of course, lived in three different centuries. She enjoys all her faculties, as well moral as physical, and what renders her age the more extraordinary is, the fact, that the air of the village has been long considered unhealthy. She was married four times; her first marriage took place 105 years ago.—*Foreign Paper.*

A Western Hermit.—About 12 miles above the junction of Spoon and Illinois rivers, immediately on the bank of the former, there has been living, for three years past, a man who had secluded himself from the world, and dwells in the midst of the wilderness alone, and upwards of 60 miles from the residence of any human being. His name is Davidson, a physician, was formerly a surgeon in the United States army, and was pupil to the celebrated Dr. Rush. He has a number of medical books, two guns, and a dog, and a quantity of clothing. He has erected himself a small hut, and has about an acre of land in cultivation—at the back of his garden runs Spoon river, in which he has a fish trap. His food is wild turkeys and other game, fish, and the produce of his garden. He appeared displeased at the sight of a human being. My informant saw him at his residence, being impelled by curiosity to visit him, and inquired of him particularly the cause of his strange seclusion. He said he had done so, and would do so ever, to keep clear of the wretched white people. His father lives in Pennsylvania, and he has received many solicitous letters from him and other friends, to return, but he has never answered one, and declares it to be his determination to remove from his present situation as soon as the whites approach too near him. As soon as his present stock of clothing wears out, he says he will dress himself in skins.—*Ind. Gaz.*

Rubens displayed an ingenious satire in a picture in the Dusseldorf collection. He represented himself as Diogenes searching for an honest man amidst a crowd of the portraits of his friends.

Turkish Love of Literature!—The Ottoman Porte has given orders to sell by weight all the fine libraries at Constantinople. Among others are mentioned those of the Princes Morusi, who have become the objects of the jealousy and hate of that despotic government, in consequence of their wealth, patriotism, and talents.

A concert was given at the Argyll Rooms on Wednesday se'nnight, in order to introduce to the public Mademoiselle Schauroth, a German child, only nine years of age, whose performance on the piano-forte had already surprised the cognoscenti of Vienna, Munich, and Paris, and has now excited the astonishment of those in London. She played upon this occasion the principal part in the beautiful and celebrated quintetto of Beethoven, in which she was accompanied by Messrs. Nicholson, Willman, M'Intosh, and Petrides; and executed her task with a precision and judgment that would have been applauded in an established professor; while her appearance and manner were so unaffectedly juvenile and engaging, as to remove all suspicions concerning her actual age. An audience, not very numerous, but exceedingly select, were assembled to hear this extraordinary child; amongst whom were the Duchesses of Clarence and Kent, Prince Esterhazy, the Prince Cariati, and most of the distinguished musical people in London.

The following strange advertisement is copied from the *Lancaster Free Press* (American paper:)—"A few copies of '*A Bridle for Devils*, being an Evangelical Curb to muzzle those who, having been bit by the Old Serpent, groan under the Infernal Quinsey—By a Lover of Whole Bones,' has been left at this office for sale—price 6¼ cents."

Lord Arundel is said to have once offered the Duke of Buckingham £7000, in land or money, for the *Ecce Homo* of Titian, in which were introduced the Pope, Charles V. and Sultan Suleyman. Of this picture there is a good copy at Northumberland-house.

NEW MUSIC AT HALF PRICE.

WILLMER and Co. No. 25, LORD-STREET, LIVERPOOL (opposite the Castle Inn) respectfully acquaint the Public, that they have just purchased upwards of 5000 Pieces of the most celebrated vocal and instrumental MUSIC, which they are now selling at HALF the published Price.

Superfine Music Paper, 3s. per Quire.

*** Orders from the Country forwarded immediately.

Printing and Book-binding neatly executed.—Books and Stationary supplied at low Prices.

The Housewife.

COFFEE.

A correspondent, in the *Annals of Philosophy* for the present month, gives the following as an improved method of preparing this delightful beverage:

"From the highly fugacious nature of that part of coffee on which its fine flavour depends, a practice has become very generally adopted of late years of preparing the liquor by mere straining.

"This method has not only the great defect of being excessively wasteful, but the coffee is likewise apt to be cold.

"Coction and the preservation of the fragrant matter are, however, not inconsistent. The union of these advantages is attainable by performing the operation in a close vessel. To obviate the production of vapour, by which the vessel would be ruptured, the boiling temperature must be obtained in a water-bath.

"In my experiments I made use of a glass phial closed with a cork, at first left loose to allow the exit of the air. Cold water was put to the coffee.

"This process is equally applicable to tea.

"Perhaps it may also be employed advantageously in the boiling of hops, during which, I understand, that a material portion of their aroma is dissipated; as likewise possibly for making certain medical decoctions.

"This way of preparing coffee and tea presents various advantages. It is productive of a very considerable economy, since, by allowing of any continuance of the coction without the least injury to the goodness, all the soluble matter may be extracted, and, consequently, a proportionate less quantity of them becomes required. By allowing the coffee to cool in the closed vessel, it may be filtered through paper, then returned into the closed vessel, and heated again, and thus had of the most perfect clearness without any foreign addition to it, by which coffee is impaired. The liquors may be kept for any length of time at a boiling heat, in private families, coffee-houses, &c. so as to be ready at the very instant called for.

"It will likewise prove of no small conveniency to travellers who have neither kettle nor coffee-pot, nor tea-pot, in places where these articles are to be procured, as a bottle will supply them.

'In all cases, means of economy tend to augment and diffuse comforts and happiness. They bring within the reach of the many what wasteful proceedings confine to the few. By diminishing expenditure on one article, they allow of some other enjoyment which was before unattainable. A reduction on quantity permits indulgence in superior quality. In the present instance, the importance of economy is particularly great, since it is applied to matters of high price, which constitute one of the daily meals of a large portion of the population of the earth.

"That in cookery also, the power of subjecting for an indefinite duration to a boiling heat, without the slightest dependition of volatile matter, will admit of beneficial application, is unquestionable."

Literature, Criticism, &c.

POLITE LITERATURE.

The following dissertation recently appeared in the *Irishman*, from which we copy the following prefatory remark:—"This essay was written in the year 1812 by John Walker, formerly a Fellow of Dublin College; a gentleman distinguished as much by his learning as he is by the conscientious rectitude of his mind. A prize question was proposed by the Royal Irish Academy—"Whether, and how far, the cultivation of *science* and that of *polite literature* assist or obstruct each other." The sentiments of such an authority, on a subject so interesting to the community, should be as widely circulated as possible.—Mr. Cobbett is remarkable for the opinions he entertains of the inutility of acquiring a knowledge of the learned languages—that a knowledge of Latin and Greek is unnecessary to the furnishing the mind with all that information which can be as effectually derived from *translations*. The contrary opinion is zealously maintained by every scholar. Mr. Walker may fairly take his place in the ranks of the latter; and his opinions, no doubt, will command the attention his literary reputation so well merits."

It is owing to the littleness and vanity of the human mind, that we are all so prone to depreciate the studies of others, while we extol the usefulness and dignity of our own. The man of science, the naturalist, the experimental philosopher, and the polite scholar, are apt each to represent his own department in literature as the only one worthy of cultivation; while, in fact, none of them could be cultivated with success, if any one of them were cultivated exclusively.

And this indeed is one of the many benefits of a truly liberal education, that it tends to correct that narrowness of view; discovers the general connexion between the multifarious objects of human intellect; lays a broad and solid foundation for the further prosecution of any one among them, which may recommend itself most to the taste of the individual; and, while it furnishes him with peculiar advantages for the successful pursuit of his own favourite study, guards him against a contemptuous indifference to the literary engagements of others.

It is in the literary, as in the natural world,

XUM

Presumptuous ignorance is forward to pronounce the uselessness of some parts in the works of nature. But an intimate acquaintance with what appears most minute and unimportant establishes the maxim, that *Nature does nothing in vain:* and to the most extended survey such a concatenation appears subsisting between her least and greatest productions, that we may doubt whether the least of them could be annihilated without disturbing the harmony and destroying the well-being of the whole.

But, although there be a similarly common interest and mutual subserviency amongst all the branches of literature, some of them are from time to time liable to pass into neglect, while others engross more than due attention. And it is one of the most important duties of those enlightened few, to whom the general superintendence of learning belongs, to check such an evil on its first appearance, and to guard against a retrograde movement in any part of human knowledge, under a conviction that it must be unfavourable in its consequences to the real progress of every other.

I have long apprehended a danger of this kind, with respect to *classical learning;* and think I perceive many alarming symptoms, which threaten its extinction. In one great empire, which now possesses the dominion or control over the larger part of Europe, classical learning is declared by authority to be unnecessary for what are called the learned professions. For several years also the convulsed state of the civilized world, unfavourable to literature universally, has been peculiary so to the elegancies of polite literature: and the general temper of the times is marked by a growing contempt for all that is ancient.

In these countries, no doubt, there are old and valuable institutions, which ensure, while they exist, a continued attention to the forms at least of classical learning. But it would be folly to deny or conceal the fact, that it has lost its hold upon the public mind. From having been once over-rated,—and perhaps partly on that very account,—it is rapidly passing into disesteem: and, to a cultivated taste, the vitiated style of modern composition must appear at once one of the consequences, and one of the evidences, of its neglect.

On these accounts, and from the intimate connexion between classical learning and all polite literature, I hope I shall be excused for somewhat narrowing the question proposed by the Academy, and confining myself in this essay to the inquiry—*How far the cultivation of* SCIENCE *and that of* CLASSICAL LEARNING *assist or obstruct each other.*

In speaking of *Science*, I shall use the word in that extended signification, which I conceive was designed to be attached to it by the terms of the question; as comprehending all those departments in learning, which are commonly distinguished from *polite* literature:—though, it may be remarked, that the name perhaps strictly belongs only to *mathematics* and the *mathematical* branches of natural philosophy; and that in mathematics the ancients are confessedly our masters. To the geometrical science of the Greek school,—unrivalled in the beauty, clearness, and accuracy, of its method,—Newton himself was indebted for the principles, which his genius extended and applied; applied, as to other subjects, so to the demonstration of that very system of the universe, which had been asserted by one of such remote antiquity as Pythagoras.

In another respect also we stand indebted to the ancient classics for all our modern improvements in science. What was it that awakened Europe from a long sleep of ignorance, in which the powers of the human mind had lain unexercised and torpid? What was the light that first broke in upon the dark ages, and roused an unlettered world to literary exertion? We were awakened, enlightened, and refined by the Greek and Latin classics, circulated through the introduction of the art of printing. Nor is it any wonder, that for some time a critical acquaintance with their writings usurped almost exclusively the name of learning; or that scholars, in their admiration of the beauties of classical antiquity, conceived at first that the whole of human knowledge was comprehended in their works. But hence certainly proceeded the original stimulus, which has issued in the present advanced state of the sciences and arts.

There might appear, therefore, some degree of ingratitude in our now consigning to neglect those classics, to whom our literary obligations are so great. And perhaps there is an equal degree of presumption in the supposition, that we have nothing more to learn from them.

I know that the ancients are commonly decried as children in science; because, charmed with the attraction of *abstract* science, they certainly did neglect experiment, and undervalued the practical applications of scientific principle. Yet, even here, such various instances stand on record of their skill in mechanics and other arts, which promote the conveniences of polished life, as prove they were not such children as many represent them. And it might abate the pride of modern knowledge, to observe how much we are indebted to *accident*, for the discovery of many of those instruments, which have made us superior to the ancients in some branches of knowledge.

But I shall yield to the adversaries of classical learning every advantage, in the argument, which they can desire. I shall suppose, that every thing valuable in the writers of Greece and Rome has been either transfused into the works of the moderns, or is accessible to the mere English reader in translations: that we are in full and permanent possession of all the information they contain in mathematics, logic, and astronomy, —in history, geography, and criticism. I shall suppose, that no more treasures of antiquity remain, to be brought to light, in all those inedited manuscripts, which, to the disgrace of literary Europe, still continue unexplored. Nay, I shall suppose that our orators and poets are as successful rivals of the ancients, as the worst of them in his ignorance and vanity can imagine.

Nor shall I insist upon that consideration, which must ever stamp classical learning with paramount importance, in the view of all the friends of Revelation; upon the connexion between sound theology and a critical interpetration of the dead languages; or upon the degree, in which their extinction must shake all historic evidence, and in this affect the very foundation of revealed truth.

Let that consequence also be supposed as desirable, as it may secretly appear to some. Let every thing, which they can demand, be conceded to those who think that the classics ought to fall into oblivion and neglect. Yet I hope to prove, that the cultivation of classical learning, as a constituent part of liberal education,—so far from obstructing science, —is most importantly conducive to its advancement; that they have common interests, and common adversaries; and that the progress of scientific, is materially impeded by the declining state of classical, learning.

There is no argument more frequently employed by the declaimers against classical learning, than that it is absurd to devote so many years, in the spring-time of life, to the study of *words;*—words, which the wise man uses but as counters, while the fool alone values them as money. But this argument, with all the changes that are rung upon it, proceeds upon multiplied mistakes; and exemplifies the abuse of words, which it professes to decry. The argument might have conclusive force, if languages were but vocabularies of unmeaning sounds. But, in learning languages, does not the youthful mind learn ideas too? Is not its stock of these materials of knowledge progressively enlarged? Are not its powers exercised in

comparing, discriminating, and combining ideas? And ought not this to be the first object of liberal education?

I speak not now of the knowledge of *things*, acquired in the perusal of the Greek and Roman classics. I speak not of the acquaintance, to which it introduces us, with the facts, the manners, the characters, the sentiments of ancient times. I speak of the initiatory exercises of grammar and of syntax; and at the early age which ought to be allotted to these, I maintain that there is no intellectual exercise better calculated to furnish the elements of thought, to fix the attention, to call forth the latent powers of the understanding, and to employ, without overstraining, its most important energies.

Indeed the connexion between language and thought is much more intimate, than superficial inquirers imagine. Language is allowed by all to be the great vehicle by which thoughts are communicated: and in this view alone, the importance of an accurate acquaintance with language is incalculable. But many are not aware, that it is also the great *instrument*—if I may be allowed the expression—of thought; that every man thinks in language, even when he thinks in privacy and utters not a word.

If there be any subject of human reason, in which the mind can exercise its powers independently of language, it may be supposed to be geometry. But let any man, most familiar with a geometrical demonstration, endeavour to present it, in all its steps, to his own mind divested of words, and he will find himself baffled in the attempt. Nor is it unreasonable to suppose, that—if words alone could be totally effaced from the recollection—the mind, though retaining all its other acquisitions, would retain them to no effectual purpose, but would be reduced to a state of infantine imbecility. With so much is it of philosophic justice, that in the Greek tongue the same term, which expresses a *word* expresses also the *reasoning* faculty.—But alas! though we cannot think without employing words, we may employ words without thinking. Were it not so, many would be tongue-tied, who are now most voluble in decrying the wisdom of our forefathers.

In scientific pursuits, no mental habit is of more importance than a readiness in examining the closeness of our own reasoning, and a quickness in detecting any latent vagueness or inaccuracy of conception. And nothing promotes this habit more than an early acquaintance with the accurate analysis of language. Any defect of correctness in thinking is betrayed most immediately by the perplexity, or want of clearness and precision, in the expressions which imbody our thoughts. And hence it is, that—as all real scholars, who have been engaged in *teaching*, must have experienced—many a man has conceived himself to possess a perfect knowledge of scientific principles, till he came to express himself on the subject to others; but then has discovered that his conceptions have been erroneous, inaccurate, or obscure. By the person unacquainted with the structure of language, and unaccustomed to examine it strictly, this evidence of defective reasoning is commonly overlooked; and he rests at once in thoughts without precision, and expressions without distinct meaning.

Let me not be understood as saying, that the skilful *linguist* must also be of course a sound reasoner. He may possess inferior powers of natural understanding; and if a mere linguist, whatever be his intellectual powers, he has neglected to exercise and invigorate them by scientific studies. But I do say, that the highest genius labours under the most considerable disadvantage in science, if not skilled in language: and that the intellect of a Bacon or a Newton could not be supposed, under such a disadvantage, to have produced the works which immortalize their names.

Yet, let not the mere linguist be despised, as a useless trifler in the field of literature. That field is so spacious, that all parts of it cannot be occupied by the same person; and to be cultivated with general advantage, some spots must receive the undivided attention of certain individuals. The objects of human knowledge are so numerous, and there subsists such a mutual subserviency of each to all, that literary labour must be divided: and none but the superficial observer will lament the minuteness of the portion, which engrosses the attention of some; or laugh at the ardour with which they prosecute the investigation of apparently unimportant objects. That very ardour of individual research, however disproportionate—even really disproportionate—to the objects which excite it, contributes to the increase and perfection of the common stock; and often gives employment to a mind, which would otherwise be idle.

I wish also the friends of science to give their special attention to this fact;—that the same men who decry the study of the dead languages as a useless waste of mental exertion,—as the unprofitable study of words instead of things,—are also the most forward to point their shafts of ridicule against such *scientific* pursuits, as present no obvious utility to the optics of these arbiters of literature. The same flippancy of presumptuous ignorance that laughs at a learned disquisition upon Greek accents, is equally prompt to deride the ardour of the naturalist in hunting butterflies, in exploring the varieties of a moss, or collecting specimens of rude stones. Nay a Newton, examining the colours of a bubble, or demonstrating the properties of a crooked line, would be screened—if screened—from their sneers, only by the celebrity of his name.

[TO BE CONTINUED.]

Correspondence.

PRONUNCIATION.

TO THE EDITOR.

SIR,—Reading at all times with pleasure your interesting publication, the *Kaleidoscope*, I note in one of your last, a letter, signed S. M. requesting that you or some of your learned correspondents will solve what he is pleased to term the following quotation from Walker's Dictionary, as a difficult and intricate problem. Walker expresses himself thus:—"There is a corrupt but a received pronunciation of this letter (a) in the words *any*, *many*, *catch*, *Thames*, where the *a* sounds like short *e*, as if written *eny*, *menny*, *ketch*, *tems*."

Being present when this friendly discussion took place, I feel it a duty incumbent on my part to state the truth. The difference of opinion between Mr. S. M. and the gentlemen present was upon the pronunciation of the word *catch*. He, Mr. S. M. asserted that Mr. Walker in his Dictionary (the 4th edition) pronounced it *ketch*. This, on referring to the work, I find quite the reverse; and the note quoted above, headed by Mr. W. "Irregular and unaccented Sounds," is a further proof of his opinion.

I cannot in conclusion but remark, that Mr. S. M.'s construction of the sentence is very *prodigious*, for it must be in his recollection that the large party present was decidedly against him.

RANGER.

Liverpool, July 2, 1823.

TIDE-TABLE.

TO THE EDITOR.

SIR,—In your last we have Mr. Kaye's letter on this subject, which says, "Your explanation is correct, and highly satisfactory. The marks alluded to are employed to denote the transit of the tide from morning to evening, and from evening to morning." Now, Sir, I myself would readily subscribe to such a letter, because I perfectly agree with it, when I view the subject in the manner in which I think Mr. Kaye has, and that is, he has made reference to only *one* blank (and not to both of them) which is the only dispute between you and me; for he does not say, as you said, that, when there are two blanks, one of them (the first) denotes twelve o'clock; but that "the marks alluded to are employed to denote the transit of the tide, &c. by which it is plain he only alludes to the occurrences of one blank; because, by your own account (which he deems so satisfactory) the two blanks together do *more* than denote the transit of the tide, for you say one of the blanks denotes twelve o'clock, and the other the transit. Hoping that I am still correct, and that Mr. Kaye will favour us with a further explanation; or that Mr. Lang, our other referee, will assist us,

I remain, &c

MARIS REFLUXUS.

SPIDERS.

TO THE EDITOR.

Sir,—After perusing your interesting paper of last week, a gentleman happened to call upon me, who is highly celebrated as a naturalist, and whose works on animals and birds will bear his name to future ages with honour. I showed him your correspondent's observations on spiders; he was much pleased with them, and said that in his youth he had observed spiders much. He had a large web near his bed, and used to supply it with flies regularly. At last the idea struck him to put a wasp into it. He caught one, and holding it by its wings until its feet got entangled, left it to its fate. The spider, a huge overgrown creature rushed from its den, but suddenly stopped cautiously to survey the intruder. After a short pause he boldly advanced to the attack. Then came the "tug of war." He seized the wasp, which, after some severe struggles, succeeded in, as he supposed, piercing the spider with his sting, causing it to retreat, and the wasp shortly regained his liberty; but he never more saw the spider. He seemed anxious that if any of your correspondents had tried the same experiment, to know if the result had been the same. I saw a very neat manœuvre, this morning, of a spider, to draw a large meat fly into the interior of his web, without damaging it. On the death of the fly, the spider placed his two fore legs over the body of the fly, so as to raise an arch of the web. He then drew the victim close to him, and, retreating another step, again raised the web, and then gave another haul at his victim; and so continued until he got the fly close to the cone of his cell, where he might with leisure devour his prey, without in the least having damaged his web. Yours, &c.

S. H.

Newcastle-upon-Tyne, June 28, 1823.

The Drama.

LIVERPOOL DRAMATIC REGISTER.

☞ When our readers have perused the following extraordinary address, we request they will take the trouble to turn to our note, appended to the article.—*Edit. Kal.*

The very flattering preface, which last week ushered into notice our second paper, demands from us an acknowlegement of more than ordinary warmth. So little used, however, are we to obligations, that you must satisfy yourselves, Messieurs Editors of the *Kaleidoscope*, simply with our unfeigned thanks for the marked favour you were pleased to confer upon us. By disavowing any participation with "*the writer or writers of this department of the Kaleidoscope*," you have, unwittingly perhaps, given to our lucubrations an importance which did not previously attach to them; for, now that *you* have renounced us, we are not without hope of rising somewhat in general estimation. Lamentable, as it certainly is, not to rank among the number of your "*judicious*" friends, and unpardonable as may be the sin of being "*opposed to them in our estimate of Mr. Vandendoff and Miss Kelly*," we cannot prevail upon ourselves to deplore this piteous heresy, nor are we particularly ambitious of becoming part or parcel of your extra "judicious" coterie; on the contrary, permit us to invite your most fastidious anathema *on every similar occasion*, with the addition only of the following motto:

"*Magna est veritas et prævalebit.*"

EDIT. REG.

July 7, *Monday*, Poor Gentleman: Sir Robert Bramble, Mr. Blanchard; Dr. Ollapod, Mr. Yates; Stephen Harrowby, Mr. Knight; Emily Worthington, Miss Smithson;—with Leon and Lisette: principal characters by Mr. St. Albin, Mad. Garbois and Madame Searle;—and Cozening: Dick Mutable, Mr. Yates.

8, *Tuesday*, Heir at Law: Lord Duberly, Mr. Blanchard; Dr. Pangloss, Mr. Yates; Zekiel Homespun, Mr. Knight; Cicely Homespun, Miss Smithson;—with Cozening, and Three Weeks after Marriage: Drugget, Mr. Blanchard; Lady Racket, Miss Kelly.

9, *Wednesday*, Merry Wives of Windsor: Falstaff, Mr. Yates; Sir Hugh Evans, Mr. Blanchard; Mrs. Ford, Miss Kelly;—with Monsieur Tonson: Morbleu, Mr. Mathews;—and Sylvester Daggerwood; —benefit of Mr. Yates.

10, *Thursday*, The Honey Moon: Jaeques, Mr. Knight; Lampedo, Mr. Blanchard; Volante, Miss Smithson; Juliana, Miss Kelly;—with Leon and Lisette, and Rosina: Rosina, Miss Graddon, her first appearance.

11, *Friday*, A Cure for the Heart Ache: Frank Oatland, Mr. Knight; Old Rapid, Mr. Blanchard; Jessy Oatland, Miss Smithson;—with the Carnival of Venice, a variety of Singing, and Love, Law, and Physic: Andrew, Mr. Knight; Flexible, Mr. Yates; —benefit of Mr. St. Albin and Mad. Garbois.

Last week introduced us again to Blanchard and Knight, both long established favourites. *Why* they are so *we* know not; unless it be because one comes from the Theatre Royal, Covent Garden, the other from Old Drury. They have, for some seasons past, regularly visited us, and hence the reason, probably, why we are now become accustomed to view their usual routine of unvaried performances, if not with any peculiar pleasure, at least without disgust. There is a sameness in all they do, that palls; a want of *character* so palpable, that having once seen them you have seen them for ever. In no wise can Sir Robert Bramble be distinguished from Lord Duberly, Lord Duberly from Old Rapid; all are Blanchard, and Blanchard only; and so it is with Mr. Knight, whose perfect uniformity, appear when, and in what he will, invariably proclaims him the same tiny, laughing, *jerking* rogue, "Mr. E. Knight, from the Theatre Royal, Drury-lane."

Miss Smithson commenced her second engagement here on Monday. She is a young lady possessing every personal requisite, with more than an every-day portion of those intellectual qualifications, without which there is no attaining scenic eminence. We confidently predicted, last year, that this unassuming daughter of Thalia, then in her noviciate, would not retrograde in our good opinion on further acquaintance; and so fully have these sanguine expectations been realized, that we now augur even more propitiously of her ultimately acquiring no mean share of public approbation. Of the gay, dissipated dame, she certainly is not the most happy representative; for there is a sombre colouring given to her vivacity that mars it. Neither does she excel as the courtly, fine lady; her personation of which lacks the dignified vigour, and the exalted feeling, elicited by a Davidson and an O'Neill. The sentimental seems to be Miss Smithson's forte; she is what may be termed the amiable of comedy—the melodramatic heroine of the day.

Miss Kelly's Lady Racket, Mrs. Ford, and Juliana, have convinced us how egregiously she must be deceiving herself if she imagines the *tragic* muse will raise her to fame and fortune. How she can so completely have mistaken herself all this while would be truly astonishing, did we not know that stage professors are frequently, at first, perversely bent on treading the exactly contrary path to that assigned them by nature and circumstances. This young lady's benefit takes place to-morrow (Tuesday) evening, when the reward due to her domestic virtues will not, we are sure, be withheld; although, for reasons which do not sufficiently appear, she hath to encounter the withering influence of a *Tuesday night*, which is proverbially the most *unfashionable* of all the seven. Filial piety has stronger claims to our notice than etiquette, and we are greatly mistaken if the liberal aristocracy of Liverpool will not cheerfully sacrifice *fashion* on the more hallowed shrine of benignity.

Mr. Mathews again delighted a brilliant audience with Morbleu, on Wednesday; and on Thursday a Miss Graddon, from Dublin made her *debût* in Rosina. We presume Miss G. succeeds Miss Hammersley, for which she is every way amply qualified. "Whilst with village maids" was rapturously and deservedly encored.

We were sorry to witness the very great failure of Mr. St. Albin's benefit, on Friday. This gentleman and Mad. Garbois merited more extensive patronage; the which, however they may lament, they will enjoy the consciousness of deserving; but they were probably unprovided with adequate *introductions*, and will surely profit by the example of Mr. Yates, whose *letters* procured for him what, *without them*, he would have found his talents could not. Mrs. Aldridge has our congratulations on the very honourable triumph she achieved over the silly fellows near the stage-box on Wednesday; a victory not less creditable than complete, and complimentary alike to herself and the *manly* part of the audience. W.

July 14, 1823.

THEATRICAL CRITIQUES.—We have inserted the prefatory note of the writers who occupy the dramatic columns of the *Kaleidoscope;* and whom we wish to be considered as the editors of that department. These gentlemen appear to take it in high dudgeon that we have disclaimed any participation in their opinions or decisions; and the language in which they have expressed their obvious chagrin, may serve as a specimen of the general spirit in which they write their philippics. We have not changed one syllable of their courteous note; but have scrupulously preserved the polite phrasеology of our independent and choleric correspondents. We admire plain speaking; and, in imitation of their laudable candour, we take occasion to say, that it is our conviction that had we identified ourselves with their high and mighty judgments, instead of questioning their infallibility, we should have come in for a share of those encomiums which they know how to lavish with an unsparing hand upon their favourites. However, we repeat that we have no ambition to be mistaken for the authors of any of the dramatic animadversions which occasionally appear in the *Kaleidoscope*, although we know that many of our readers are gratified by their perusal, and that too in proportion to their acrimony. We disclaim the cynical spirit in which such critiques are too often conceived. We not unfrequently find a second-rate actor puffed up into a Magnus Apollo; and a valuable performer either wholly passed over, or "damned with faint praise." Such writers, too often, as Sancho says, "expect better bread than is made of wheat," and we accordingly find them railing at some poor actor, whose cast of characters neither requires nor admits of any higher powers than he possesses. In fine, we consider it a very unenviable propensity to dwell rather upon defects than beauties, to discourage and perhaps drive from their profession, actors, who with proper encouragement and mild and judicious expostulation, might become ornaments of the stage.

If we have written these hasty remarks with any portion of that temper which our critics so often exhibit themselves, our excuse must be the contagion of their example. —*Edit. Kal.*

To Correspondents.

☞ THE LAST NUMBER OF THE KALEIDOSCOPE will be received in exchange for any other number; or three-pence each will be paid for clean copies, if brought in this day or to-morrow.

PERKINS'S STEAM-ENGINE.—The large circle ZZ in the left-hand corner of our engraving, is intended to represent the Indicator.

INDEX TO OUR THIRD VOLUME.—We find that several copies of the Index have been delivered to subscribers and others without the title-page. We shall cheerfully supply the deficiency to those who may apply at our office.

W's letter on matrimony shall appear in the next *Kaleidoscope*. We are happy to recognize in the writer an old and esteemed correspondent; we beg to thank him for his patience with regard to a former favour, which has been repeatedly postponed, in the hope that we should find room for it in the publication for which it was originally destined. The approaching adjournment of Parliament will enable us to fulfil our intentions.

Homo is informed that one of his pieces, prepared for present insertion, has been postponed, to admit the description of Perkins's steam-engine, occupying five columns of this day's *Kaleidoscope*.

We have been favoured with the communication of *H. O. R.* and a *Friend* and *Reader*.

SYRUP IN TARTS.—The explanations of *W. A. C.* and *E.* in our next

The DREAM OF DIOGENES shall be attended to.

Letters or parcels not received, unless free of charge.

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